ABSTRACTS

This section of the JOURNAL *is published in collaboration with the three abstracting Journals,* ABSTRACTS OF WORLD MEDICINE, ABSTRACTS OF WORLD SURGERY, OBSTETRICS, AND GYNAECOLOGY, *and* OPHTHALMIC LITERATURE, *published by the British Medical Association. The abstracts are divided into the following sections: Syphilis (General, Pathology, Therapy); Gonorrhoea (General, Pathology, Therapy); Chemotherapy; Other Venereal Disease Conditions; Public Health; Miscellaneous. After each subsection of abstracts follows a list of articles that have been noted but not abstracted. All subsections will not necessarily be represented in each issue.*

SYPHILIS (General)

Immunizing Action of the Skin in Syphilis. (Contribution a l'étude de l'action immunisante de la peau dans la syphilis.) HIGOUMENAKIS, G. (1951). *Ann. Derm. Syph., Paris,* **78,** 144, 2 figs, 7 refs.

Irregular or insufficient treatment of sero-negative primary syphilis predisposes the patient to neurosyphilis and to the precocious appearance of this complication.

Early syphilis is better untreated than badly treated. This conclusion is supported by the observation that unrecognized and untreated syphilis often runs a benign course. This is probably due to the development of immunity as a result of secondary or tertiary skin lesions. The immunizing action of the skin is proportionate to the extent of the lesions. The benign evolution of syphilis in cases with widespread skin lesions (specific or non-specific) seems to imply that immunity is developed in the skin. *James Marshall*

New Developments in Venereal Disease Control in the United States and Abroad. INGRAHAM, N. R. (1951). *Trans. Stud. Coll. Phys. Phila.,* **19,** 25.

Case-Finding of Early Syphilis by the Public Health Nurse. BULLA, A. C., WAKEFIELD, F., and HUNT, M. E. (1951). *J. vener. Dis. Inform.,* **32,** 122.

Reports of the North Carolina Syphilis Studies. VI. Indices in the Measurement of Congenital Syphilis. WRIGHT, J. J., SHEPS, C. G., and GIFFORD, A. E. (1951). *Amer. J. Syph.,* **35,** 225. 2 figs, 13 refs.

A Positive Serology Reaction of Syphilis in Relation to Laws of Immigration. CITRON, J. (1951). *Hebrew med. J.,* **1,** 200. 10 refs.

Syphilis Prevalence and Community Structure. WARNER, W. L., HILL, M. C., BOWDOIN, C. D., RION, J. W., and MCCALL, B. (1951). *J. vener. Dis. Inform.,* **32,** 157. 2 figs, 5 refs.

Case-Finding through an Understanding of Known Syphilitic Patients. GRAY, A. I., BAUER, T. J., USILTON, L. J., and CARLSON, R. O. (1951). *J. vener. Dis. Inform.,* **32,** 144.

Syphilis Case-Finding through Education. MORSE, J. W., and ISKRANT, A. P. (1951). *J. vener. Dis. Inform.,* **32,** 150. 1 fig, 7 refs.

Renal Function Studies in Acute Syphilitic Nephrosis before and after Treatment with Penicillin. FURMAN, R. H., GALE, R. G., ORY, E. M., and WEINSTEIN, A. (1951). *Ann. intern. Med.,* **35,** 444. 1 fig, 18 refs.

Gummatous Syphilitic Splenomegaly. Report of a Case. HARMOS, O., and MYERS, M. E. (1951). *Amer. J. clin. Path.,* **21,** 737. 5 figs, 14 refs.

A Primary Chancre of the Vagina. Report of a Case. PUTKONEN, T. (1951). *Acta derm.-venereol., Stockh.,* **31,** 395. 7 refs.

Increase of Sensitivity to Organic Luetin on Repeated Testing. SEEBERG, G. (1951). *Acta derm.-venereol., Stockh.,* **31,** 442. 5 refs.

Acute Ascending Myelitis following the Administration of Neoarsphenamine. MATHUR, K. S., and GOUR, K. N. (1951). *J. Indian med. Ass.,* **20,** 397. 7 refs.

Syphilis of the Stomach. FANCHER, P. S. (1951). *Ann. intern. Med.,* **35,** 240. 5 figs, 14 refs.

The Occurrence of the Jarisch-Herxheimer Reaction in a Patient with Gummatous Syphilitic Aortitis. WHORTON, C. M., and DENHAM, S. W. (1951). *Amer. J. Syph.,* **35,** 255. 4 figs, 17 refs.

Saccular Aneurysm of the Aorta in a 32-year-old Man with persistently Negative Serologic Tests. KAHN, A., and KILBURY, M. J. (1951). *Amer. J. Syph.,* **35,** 263. 4 figs, 21 refs.

Involvement of the Stomach in Early Syphilis, "Precocious Tertiarism". Report of a Case. BELL, C. D. (1951). *Amer. J. Syph.*, **35**, 284. 7 figs, 11 refs.

Neuropsychiatric Affections and Endemic Syphilis in Bosnia and Herzegovina. [In English.] ZEC, N. (1951). *Acta med. iugoslav.*, **5**, 176. 45 refs.

Congenital Syphilis. SHAH, J. M. (1951). *Medicus*, **1**, 190. 4 refs.

Blindness due to Syphilis. KLAUDER, J. V. (1951). *J. vener. Dis. Inform.*, **32**, 183. 15 refs.

Endemic Syphilis in Africa. The Njovera of Southern Rhodesia. WILLCOX, R. R. (1951). *S. Afr. med. J.*, **25**, 501. 3 figs, 16 refs.

Penicillin and Syphilis of the Ear. Part III. TAMARI, M. J., and ITKIN, P. (1951). *Eye, Ear, Nose Thr. Mon.*, **30**, 358. Bibl.

Syphilitic Paroxysmal Cold Hemoglobinuria causing Transfusion Reaction: Response to Penicillin. HILL, N. P. (1951). *Amer. J. Syph.*, **35**, 329. 9 refs.

Congenital Pulmonary Syphilis (Hérédo-syphilis pulmonaire). LEDOUX, P. (1951). *J. Méd. Lyon*, **32**, 735.

Investigation and Diagnosis of Pulmonary Syphilis (Alla ricerca della sifilide polmonare). MONTANINI, N., and PELLEGRINO, R. (1951). *Ann. Ist "C. Forlanini,"* **13**, 53. 2 figs, 48 refs.

Modern Management of Syphilis (Die heutige Lage in der Syphilisbehandlung). BURCKHARDT, W. (1949–50). *Arztl. Mh.*, **5**, 621.

Prevention and Treatment of Syphilitic Lesions in the Circulatory System (Las lesiones luéticas en el aparato circulatorio. Su profilaxis y terapéutica). BONNIN SEGURA, N. (1951). *Arch. Enferm. Corázon*, **54**, 6.

Syphilis and Tuberculosis (Syphilis und Tuberkulose). STREITMANN, B. (1951). *Klin. Med.*, **6**, 307. 13 refs.

Congenital Syphilitic Nephritis (Nefrite luética inata). COSTA, A. (1951). *Pediat. prát.*, **22**, 1. 2 figs, 22 refs.

A Nasal Gumma (Uber ein Gumma der Nase). WINKLER, A. (1951). *Z. Haut- u. GeschlKr.*, **11**, 93. 11 refs.

Studies in the Prognosis of Syphilis. Notes on 236 Accidents of Late Syphilis (Contribution à l'étude du pronostic de la syphilis. A propos de 236 observations d'accidents tertiaires et quaternaires). OLIVIER, L., and BAY, A. (1951). *J. Med. Lyon*, **757**, 693.

An Unusual Case of Acute Congenital Syphilitic Meningitis (Sur un cas rare de méningite luétique congénitale aiguë). STATHOPOULOS, E. (1951). *Ann. paediatr., Basel*, **176**, 385. 7 refs.

Interstitial Keratitis in Acquired Syphilis (Kératite interstitielle de la syphilis acquise). BONNET, J. L. (1950). *Lyon méd.*, **183**, 10.

SYPHILIS (Pathology)

Studies on Treponemal Immobilising Antibodies in Syphilis. I. Techniques of Measurement and Factors influencing Immobilization. NELSON, R. A., and DIESENDRUCK, J. (1951). *J. Immunol.*, **66**, 667.

Variations in the density of the treponemal suspension between 8×10^5 and 150×10^5 organisms per ml. were without effect on the degree of immobilization. The rate of immobilization was found to vary with the concentration of antibody, but even with the highest concentration of serum used, there was a lag period of two hours before immobilization began. With low concentrations of complement this initial lag period was increased. When treponemata were presensitized by exposing them to the action of serum containing immobilizing antibody for 16 hours before the addition of complement, the lag period was diminished, and even low concentrations of complement were found to produce significant immobilization.

The titre of immobilizing antibody can be determined by finding the serum dilution which will immobilize 50 per cent. of the treponemata after incubation at 35°C. for 18 hours. S-shaped curves are obtained by plotting the serum dilution against the per cent. immobilization and the 50 per cent. end point found by interpolation. The same serum was examined on thirteen occasions over a period of 7 months; the results agreed to within $\pm$ 25 per cent. The cause of false positive and negative results is discussed.

[This important paper describes modifications of the test and contains much technical detail which cannot be dealt with in an abstract. The original paper should be consulted by those interested.] *A. E. Wilkinson*

Immunological Relationships among Species and Strains of Virulent Treponemes as determined with the Treponemal Immobilisation Test. KAHN, A. S., NELSON, R. A., and TURNER, T. B. (1951). *Amer. J. Hyg.*, **53**, 296.

Four strains of *T. pallidum*, two of *T. pertenue* and one of *T. cuniculi* were used in this investigation. Antisera were produced by the intra-testicular inoculation of rabbits, and the immobilizing titre (the dilution of serum immobilizing 50 per cent. of treponemata after 18 hrs. incubation at 35°C. in the presence of 10 per cent. complement) was determined against the homologous and other strains.

A high degree of cross reaction was found between the two strains of *T. pertenue* and *T. pallidum* (Nichols strain). There appears to be a definite antigenic difference between *T. cuniculi* and *T. pallidum* and *T. pertenue*. Antisera against *T. cuniculi* showed significantly lower immobilizing titres against *T. pallidum* and *T. pertenue* than against the homologous strain.

In similar experiments with the four strains of *T. pallidum*, three strains showed a high degree of cross

reaction. Antisera against the fourth strain, despite having a high immobilizing titre against the homologous organism, showed significantly lower titres against the other three strains; this suggests that there may be antigenic differences between strains of *T. pallidum*.

The sera of rabbits immunized with the Reiter, Kazan, and S-26 strains of non-virulent spirochaetes showed no immobilizing power against *T. pallidum*, *T. pertenue*, or *T. cuniculi*, although agglutinins against the infecting organisms were present to a high titre.

A. E. Wilkinson

Mazzini Cardiolipin Microflocculation Test for Syphilis. MAZZINI, L. Y. (1951). *J. Immunol.*, **66**, 261. 9 refs.

In this test the disadvantage of the slow "ripening" of the Mazzini lipoidal antigen emulsion has been overcome by using a variant which allows the emulsion to reach optimal sensitivity immediately after its preparation. This renders the test usable in emergencies and adaptable to a particular serological routine. An improved technique of preparing the emulsion and performing the test is detailed, whereby the cardiolipin-lecithin antigen becomes more efficient in both sensitivity and specificity.

The tendency of the antigen to produce a disproportionate number of zonal reactions with strongly positive sera has been overcome by decreasing the quantity of serum, adding saline after the primary rotation, and recentrifuging at a slower speed for an additional 4 minutes. Both specificity and sensitivity are increased, but false positive reactions continue to occur in many diseases other than syphilis. The test is applicable to spinal fluids, requires a very small amount of serum, and seems to be as sensitive and reliable as the complement-fixation test. *T. Anwyl-Davies*

The Effects of Sex, Castration, and Testosterone upon the Susceptibility of Rabbits to Experimental Syphilis. MAGNUSON, H. J., ROSENAU, B. J., and GREENBERG, B. G. (1951). *Amer. J. Syph.*, **35**, 146.

The authors took 46 adult male and 38 female rabbits; 22 of the former were normal and 24 castrated; 27 of the latter were normal and eleven spayed; each group was divided into three, one receiving no testosterone, one receiving 0·3 mg. per kg. body weight daily to a total of 13·2 mg. per kg., and the third 1 mg. per kg. daily to a total of 83 mg. per kg. Emulsions of *Treponema pallidum* ranging from 10 to 10^6 organisms were inoculated into six sites over the backs of the animals.

Results showed that the incubation period is shorter in males than in females, but the latter develop more lesions with the same inocula; castration in both sexes prolongs the incubation period and increases the resistance to infection; the shorter incubation period in the male is presumably due to more rapid division of the treponemata or to increase in the local reaction. Testosterone in increasing doses shortens the incubation period and increases the susceptibility in the male; in the castrated female large doses prolong the incubation period and increase resistance to infection. These paradoxical results suggest that testosterone interacts with sex factors, probably hormonal in nature.

T. E. Osmond

Contamination of Cerebrospinal Fluid by Blood in Examinations for Neurosyphilis. [In English.] PUTKONEN, T., and KAJANNE, H. (1951). *Ann. Med. intern. fenn.*, **40**, 28. 1 fig, 16 refs.

Heterologous Strain Immunity in Experimental Syphilis. MAGNUSON, H. J., and THOMPSON, F. A. (1951). *J. Immunol.*, **67**, 35. 9 refs.

Relationship between Treponemal Immobilizing Antibodies and Acquired Immunity in Experimental Syphilis. MAGNUSON, H. J., THOMPSON, F. A., and MCLEOD, C. P. (1951). *J. Immunol.*, **67**, 41. 12 refs.

False Positive Serological Reactions for Syphilis. SINGH, B. (1951). *Indian J. med. Sci.*, **5**, 318. 16 refs.

Penicillin in the Treatment of Experimental Syphilis of Rabbits. KOLMER, J. A. (1951). *Arch. Derm. Syph., Chicago*, **64**, 169. 7 refs.

Influence of Irradiation and Penicillin on Experimental Syphilis Transmission. PROBEY, T. F. (1951). *Publ. Hlth Rep., Wash.*, **66**, 644. 9 refs.

Studies on the Treponemes of Bejel. I. History, Morphologic Characteristics, and Staining Properties. RIZK, E., GARABEDIAN, G., CHAGLASSIAN, H., and PIPKIN, A. (1951). *Amer. J. Syph.*, **35**, 201. 6 figs, 5 refs.

II. Transmission to Rabbits and Observations on the Course of the Experimental Infection. RIZK, E., SHWAYRI, E., and GARABEDIAN, G. (1951). *Amer. J. Syph.*, **35**, 207. 4 figs, 4 refs.

Relative Effectiveness of Penicillin Therapy in Early and Latent Syphilis in Rabbits. ARNOLD, R. C., and MCLEOD, C. P. (1951). *J. vener. Dis. Inform.*, **32**, 120. 3 refs.

Studies on the Life Cycle of Spirochetes. VII. The Life Cycle of the Kazan Nonpathogenic *Treponema Pallidum* in Culture. DELAMATER, E. D., HAANES, M., and WIGGALL, R. H. (1951). *Amer. J. Syph.* **35**, 216. 44 figs, 6 refs.

Meinicke's Clarification Reaction (MKR II) for Syphilis. [In English.] WAHI, P. N. (1951). *Indian J. med. Sci.*, **5**, 234.

Quantitative Serological Reactions in Syphilis (Die quantitativen Seroreaktionen bei Syphilis). DOEPFMER, R. (1951). *Ärztl. Wschr.*, **6**, 529. 7 figs.

SYPHILIS (Therapy)

Topical Cortisone in Treatment of Syphilitic Ocular Disease. HORNE, G. O. (1951). *Brit. med. J.*, **1**, 1289. 14 refs.

Five cases of syphilitic eye disease were treated with cortisone administered three-hourly as drops. Two were primarily iridocyclitis and three primarily interstitial keratitis, congenital or acquired. In all cases rapid reduction of the inflammatory signs was noted in periods varying from 11 to 28 days. In one, relapses continued to occur when treatment was discontinued, and in another, in which treatment was perforce incomplete, some signs of disease activity remained. Relief of pain and photophobia and improvement of vision are described as dramatic in all cases. *H. E. Hobbs*

Contribution to the Fight against Blindness due to Diseases of the Cornea. III. A New Treatment of Parenchymatous Keratitis and Congenital Syphilis (Ein Beitrag zur Bekämpfung der Erblindung durch Hornhauterkrankungen: III. Eine neue Therapie der Keratitis parenchymatosa e lue hereditaria). FRIEDE, R. (1951). *Klin. Mbl. Augenheilk.*, **119**, 23.

Syphilitic diseases of the eye usually respond well to any specific treatment, but parenchymatous keratitis and congenital syphilis are exceptions. However, it is necessary to carry out specific treatment to eliminate the causative organism and to avoid any further damage. Specific treatment carried out carefully may fail to protect the healthy eye even though the Wassermann reaction becomes negative. The duration of specific treatment depends upon whether the patient has been seen in the progressive or in the regressive stage. Parenchymatous keratitis often subsides even without any specific treatment. Non-specific treatment (injections of iodide, subconjunctival injections of sodium chloride or mercury preparations, *x* rays, milk injections, iontophoresis, malaria infection, tuberculin treatment, local application of specific drugs) has been tried but without result.

The author divides his treatment into two parts: (1) specific treatment by intra-corneal and sub-conjunctival injections of penicillin and general specific treatment which acts only if the keratitis has been caused by the spirochaete. The toxins may not be neutralized at the same time. The toxins can be formed locally in the cornea or can reach the cornea through the bloodstream; (2) non-specific treatment having as its object the quickest possible reduction of the oedema. This was obtained by massive perilimbal, sub-conjunctival hypertonic dextrose injections, by intracorneal dextrose injections, by drying up the corneal surface with radiant heat, and bathing in hot water. The results are seen in 1 to 2 weeks. The more difficult treatment of the deep corneal opacities is done by punctures of the anterior chamber, by trephining (paracentral) reaching to Descemet's membrane. The process is usually arrested in 3 to 4 weeks. Clearing of the central and deep opacities takes longer and is usually very slow. The author could not obtain an acceleration of the process of regeneration. He is confident that blindness through corneal diseases can be avoided if parenchymatous keratitis and congenital syphilis are tackled in time. *L. Weisselberger*

Penicillin Levels in Spinal Fluid after Intramuscular Injection of Procaine Penicillin. WRIGHT, R. D., THAYER, J. D., NICHOLSON, F. P., and ARNOLD, R. C. (1951). *J. vener. Dis. Inform.*, **32**, 39. 6 refs.

Penicillin levels in the cerebrospinal fluid were determined on 198 specimens taken from 114 patients, seventy of whom had normal spinal fluids. Estimations were made at various intervals after a course of 600,000 units of procaine penicillin with 2 per cent. aluminium monostearate given every 24 hours for six doses. Serum levels as high as 0·6 unit per ml. were demonstrated after the last injection. Detectable levels of penicillin in the cerebrospinal fluid were obtained from 2 to 290 hours after the beginning of the injections, 82 per cent. of the specimens showing a level at 31 hours, and 91 per cent. at 122 hours.

From 22 patients given single injections of only 300,000 units, four of the specimens showed a measurable amount of penicillin in the cerebrospinal fluid and eight showed a trace. *R. R. Willcox*

Observations on Treatment of Cardiovascular System Syphilis with Aqueous Penicillin G. JOHNSON, S. A. M., and SHAPIRO, H. H. (1951). *Arch. Derm. Syph., Chicago*, **63**, 426. 25 refs.

The authors treated seventeen patients suffering from established cardiovascular syphilis with 4,008,000 units of aqueous benzyl penicillin. A gradually increasing dosage scheme was employed commencing with eight 3-hourly injections of 1,000 units on the first day of treatment and rising to 40,000 on the eighth and subsequent days. Of the seventeen patients, five died after 2, 270, 350, 527, and 854 days respectively. No Herxheimer reactions were encountered, but orthodiagraphic study revealed a subsequent worsening of cardiac damage in seven patients, improvement in three, no change in five, and equivocal results in two.

The authors found orthodiagraphic control to be more sensitive than that of radiography or electrocardiography. Adjuvant treatment with heavy metals was not given.

[It is regrettable that no account is given of the necropsy findings, if any, in the patients who died.]

G. L. M. McElligott

Aureomycin and Its Effect in Early Syphilis. Progress Report. RODRIQUEZ, J., PLOTKE, F., WEINSTEIN, S., and HARRIS, W. W. (1951). *Arch. Derm. Syph., Chicago*, **63**, 433. 4 figs, 1 ref.

This is a study of 67 patients with dark-field-positive early syphilis who were treated with 70 g. aureomycin by mouth in 11 days. At the end of 6 to 7 months all the three primary sero-negative patients were clinically and serologically normal, as were also the two primary sero-positive ones. Of the 62 secondary cases, 37 became sero-negative, thirteen had a weakly positive reaction of 3 Kahn units or less, and ten one of 4 Kahn

units or more. One patient was thought to have been reinfected and another was classified as a muco-cutaneous relapse. The incidence of transient toxic effects of treatment was high, there being fifty cases of vomiting and 62 of nausea. High and sustained blood aureomycin concentrations were easily maintained by the oral route, and in one-half of the patients aureomycin was detected in the spinal fluid during treatment. The shortest time interval before a lesion became dark-field-negative was 17 hours and the longest 65 hours, the average time for a group of 25 patients being 39 hours.

[These preliminary results suggest that oral aureomycin may be reasonably effective in the treatment of early syphilis, but continued studies are necessary to determine its place, if any, in the therapeutic field.]

G. L. M. McElligott

Penicillin Treatment of Syphilis in Children (Пенициллин в терапии сифилиса у детей). RAITZ, M. M., FABRIKANT, G. L., and LIBERMAN, I. S. (1951). *Pediatrija*, **1**, 35.

A group of 220 children with syphilis were treated with penicillin and observed over a period of up to 4 years; 130 were infants with congenital infection; one-third of the cases were not seen until the disease had been present for 1 to 3 months. The dose was 300,000 to 500,000 units per kg. daily in six doses given intramuscularly, latterly changed to three doses given subcutaneously in 0·5 per cent. procaine; the course of treatment lasted for 12 to 15 days and was repeated after 3 to 4 weeks. Small doses (5,000 units) were given at first in order to avoid Herxheimer reactions, and the dose was increased later to 20,000 units. Skin lesions regressed in 3 to 10 days, and rhinitis disappeared in a quarter of the cases at the end of one course; destructive bone lesions healed after 1 to 2 months, and periostitis after 2 to 4 months. Enlargement of the liver and spleen responded less rapidly and often progressed during the course of treatment, but nephritis improved rapidly and the urine was often normal at the end of the first course. The general condition of the infants improved, anaemia disappeared, and they put on weight. Of 135 children, 76 of whom were infants with congenital syphilis, fifteen died (thirteen infants), ten of them during the first course, while six died out of 93 children (including 75 infants) treated subsequently with larger doses. The Wassermann reaction usually became negative 2 to 4 months after beginning treatment, but remained positive in some cases until combined therapy was given. Arsenical compounds were given at a later stage in view of the possibility of relapse after treatment with penicillin alone.

The authors also gave penicillin treatment to forty patients between the ages of 6 and 17 years suffering from acquired syphilis. Smaller doses were given in this group: 100,000 to 150,000 units were given per kg., with a total of 2 to 3·5 million in a course. Good results were obtained; there was complete restoration of vision in five of seven cases of keratitis, involvement of the central nervous system was arrested in other cases, and the Wassermann reaction became negative in ten of sixteen patients. Relapses may occur later if treatment with the usual preparations is not given as well.

D. J. Bauer

Treatment of Neurosyphilis with Penicillin combined with Artificial Fever Therapy. II. Further Observations. EPSTEIN, N. N., and ALLEN, J. R. (1951). *Arch. Derm. Syph., Chicago*, **63**, 419. 5 refs.

Though excellent results in the treatment of neurosyphilis with penicillin alone have been reported by many workers, the authors are persisting in the study of the fever-with-penicillin method of therapy, believing that the ultimate efficacy of any treatment cannot be ascertained until after many years of study: 81 patients with various forms of neurosyphilis were treated with approximately twenty daily injections of 300,000 units of procaine penicillin in oil with aluminium monostearate (P.A.M.). Four or five episodes of fever, induced by the blanket method, with temperatures of 104° to 105° F. (40° to 40·6° C.) were given during the treatment period. In the majority of symptomatic patients the clinical response was satisfactory, except, as was to be expected, in tabes dorsalis. Four patients with moderate or mild degrees of primary optic atrophy improved after treatment, though other severe cases were unaffected. The cell count, protein content, and colloidal gold reaction of the spinal fluid tended to revert to normal within one year, but the Wassermann reaction in both blood and spinal fluid usually remained positive. The authors agree that their results cannot be accurately compared with those of penicillin alone in the treatment of neurosyphilis.

G. L. M. McElligott

Chloromycetin (Chloramphenicol) in the Treatment of Various Types of Syphilis. A Preliminary Follow-up. ROMANSKY, M. J., OLANSKY, S., TAGGART, S. R., LANDMAN, G. S., and ROBIN, E. D. (1951). *Amer. J. Syph.*, **35**, 234. 6 refs.

The authors have treated 103 patients—33 with primary, 46 with secondary, eleven with early latent, and thirteen with other forms of syphilis—with chloramphenicol, 30 to 60 mg. per kg. orally, over 4 to 8 days and observed them for 5 to 6 months. The healing of the lesions of the 79 cases of early syphilis was as rapid as with penicillin, and there was one relapse and three reinfections at 5 to 6 months. The highest percentage of sero-negativity was noted in those receiving 60 mg. per kg. over 8 days. Serological improvement occurred in all but one of the eleven cases of early latent syphilis, but none achieved sero-negativity duting the period of observation. Three patients with gummatous ulceration of the legs received 60 mg. per kg. over 8 days. The ulcers healed in all, but relapsed at 2 months in one, healing again after only 30 mg. per kg. had been given over 8 days. The mechanism of healing appeared to differ from that obtained with penicillin, as no decrease in diameter took place until the ulcers had filled up from the bottom.

Of five patients with neurosyphilis treated, one had paresis, two acute meningovascular syphilis, one optic atrophy, and one tabes dorsalis. The two with meningovascular syphilis and the one with paresis all showed a restoration to normal of the cerebrospinal fluid cell count but without other changes at 15 days, but were subsequently lost to surveillance. The patients with optic atrophy and tabes dorsalis showed no improvement

at 6 to 8 months. Six of the patients with early syphilis were pregnant at the time of treatment. There was one definite failure in the children in so far as secondary lesions developed at 2 months, but the status of the remainder at 1 to 3 months was satisfactory.

Reactions to chloramphenicol were infrequent and consisted of dryness of the mouth and diarrhoea in a few cases. Herxheimer reactions were noted. Five patients developed a red granular glossitis and pharyngitis, which disappeared following the administration of vitamin B. *R. R. Willcox*

Newer Concepts of Therapy in Syphilis. HERMANS, E. H. (1951). *Acta derm.-venereol., Stockh.*, **31**, 375. Bibl.

Local Cortisone Acetate Therapy in Congenital Syphilitic Interstitial Keratitis. A Preliminary Report. SIMPSON, W. G., ROSENBLUM, B. F., WOOD, C. E., and STAMMER, E. L. (1951). *J. vener. Dis. Inform.*, **32**, 116.

The Total Dosage Factor in the Use of Crystalline Penicillin G. The Treatment of Early Syphilis. PLOTKE, F., RODRIQUEZ, J., and SCHWEMLEIN, G. X. (1951). *Amer. J. Syph.*, **35**, 240. 2 figs, 7 refs.

One-Injection Schedule for the Treatment of Early Syphilis. RODRIQUEZ, J., SCHWEMLEIN, G. X., and PLOTKE, F. (1951). *Amer. J. Syph.*, **35**, 246. 3 figs.

Penicillin Therapy of Cardiovascular Syphilis with Large Total Dosage. Its Rationale based on Histologic Studies. BRUETSCH, W. L. (1951). *Amer. J. Syph.*, **35**, 252. 13 refs.

Homologous Serum Hepatitis complicating Therapeutic Malaria for Neurosyphilis. KOTEEN, H., KANE, C. A., and ROSENBERG, M. (1951). *Amer. J. Syph.*, **35**, 270. 3 figs, 20 refs.

Clinical Follow-up Studies on 130 Cases of Long-Standing Paretic Neurosyphilis treated with Penicillin. ROSE, A. S. and CARMEN, L. R. (1951). *Amer. J. Syph.*, **35**, 278. 1 ref.

The Present Status of Penicillin in the Management of Syphilis. KILE, R. L. (1951). *Ohio St. med. J.*, **47**, 522.

Cerebral Blood Flow and Metabolism in Neurosyphilis. The Effects of Penicillin, Induced Fever, and other Therapeutic Measures. HEYMAN, A., PATTERSON, J. L., NICHOLS, F. T., and JONES, R. W. (1951). *Amer. J. Syph.*, **35**, 301. 14 refs.

New Anti-Syphilitic Treatment with Terramycin. (La terramycine nouvelle médication anti-syphilitique.) LEVADITI, C., and VAISMAN, A. (1951). *Pr. méd.*, **59**, 849. 8 refs.

A New Arsenical Compound for Syphilis Therapy with Observations on the Problem of the Treatment of Syphilis with Penicillin Alone or in Combination (Sobre un nuevo compuesto arsenical para el tratamiento de la lúes, con observaciones sobre el problema del "tratamiento penicilínico exclusiveo o combinado de la lúes"). HUELLSTRUNG, H. (1951). *Folia clin. int., Barcelona.*, **1**, 292. Bibl.

Penicillin in Neurosyphilis (Neurosifilis y penicilina). GISPERT CRUZ, I. de, GIRONS, R., and SEGARRA-OBIOL, J. M. (1951). *Rev. clín. esp.*, **41**, 247. 36 refs.

Intradermal Penicillin in the Treatment of Primary Syphilis (Penicillina per via intradermica nella cura dell'infezione luetica). LANZO, A. (1950). *Boll. Soc. ital. Med. Ig. trop.*, **10**, 104.

Results and Side-Effects of Penicillin Therapy in Syphilis (La penicilline, son action et ses accidents dans le traitement de la syphilis). PHOTINOS, P. (1951). *Ann. Derm. Syph., Paris.*, **78**, 297.

Theoretical and Practical Principles of Penicillin Therapy in Congenital Syphilis (As bases teoricas e praticas do tratamento da sifilis congenita com penicilina). SAMPAIO ZACCHI, M. A. (1951). *Pediat. prát.*, **22**, 11. 43 refs.

Penicillin Therapy in Early Syphilis (A Penicilina no tratamento da sífilis recente). RIBAS, E. B. (1951). *Rev. méd. Parana.*, **19**, 97. 46 refs.

GONORRHOEA (General)

Penicillin Prophylaxis in Ophthalmia Neonatorum. LEHRFELD, L. (1951). *Eye, Ear, Nose, Throat Mon.*, **30**, 367.

A vehement plea is made that silver nitrate prophylaxis should be completely eliminated, and that penicillin therapy should be given instead to all mothers suspected of having gonorrhoea at the time of delivery.

The principal arguments are that damage follows the erroneous use of concentrated solutions—this applies to most drugs—and that penicillin is agreed to be the better therapeutic agent. [Surveys in favour of this view are given but important surveys, such as that of the report of the investigating committee of the American Academy of Ophthalmologists, approved by the Section of Ophthalmology of the American Medical Association, with an opposite conclusion are not mentioned. It could be added that the majority of cases of gonococcal ophthalmia are derived from mothers in whom the disease has not previously been suspected, and that, where the disease is known to exist, specific treatment is normally given in any event as well as the routine prophylactic drops to the infant.]

P. D. Trevor-Roper

Aureomycin as Prophylaxis against Ophthalmia Neonatorum. CLARK, S. G., and CULLER, A. M. (1951). *Amer. J. Ophthal.*, **34**, 840. 2 tables, 17 refs.

A comparison is made between silver nitrate and aureomycin in giving prophylaxis against ophthalmia

neonatorum; 442 infants were given silver nitrate prophylaxis and 1,000 were given aureomycin. Two drops of aureomycin were instilled into each conjunctival sac immediately after birth.

The silver nitrate caused an immediate reaction with discharge, redness, and swelling in 20 per cent. of infants but the immediate reaction can be reduced by irrigating soon after the instillation. There was no unfavourable immediate reaction after aureomycin prophylaxis. No case of gonococcal ophthalmia occurred in either series. The sporadic occurrence of bacterial infection during the first few days of life was about equal in each series. *D. Ainslie*

Use of systemically administered Penicillin as a Prophylactic against Ophthalmia Neonatorum. SWEET, L. K., BARTER, R. H., COMMINGS, P., FEATHERSTONE, W. M., PARKER, G. F., OVEN, R., FAIRCHILD, J. P., MOHR, J. F., MCDONALD, J. J., and MILLER, R. T. (1950). *Amer. J. Dis. Child.*, **80**, 868.

A single dose of 50,000 units of crystalline penicillin intramuscularly appears to be as effective as the Credé method. The authors applied the two methods alternately in a series of 5,919 births. *S. J. H. Miller*

The Provocation of Latent Gonococcal Vaginitis by means of the Ethyl Chloride Spray (Provokation bei der latenten Zervix-Gonorrhöe mittels Chloräthylspray). SCHLÜREN, E. (1951). *Zbl. Gynäk.*, **73**, 964. 13 refs.

Eradication of Gonorrhea in a District of Greenland. MARCUSSEN, P. V., and RENDAL, J. (1951). *Amer. J. Syph.*, **35**, 356. 4 refs.

Gonococcal Rheumatism (Rhumatisme gonococcique). CAMUS, J. P. (1951). *Gaz. méd. France*, **58**, 453.

GONORRHOEA (Pathology)

Role of Viruses and "L" Organisms in Gonorrhoea (Rôle des virus et des formes "L" dans la blennorragie). DUREL, P., and BOREL, L. (1951). *Bull. Soc. franç. Derm. Syph.*, **58**, 144. Bibl.

A review is given of the literature together with personal observations on the problem of secondary infections with gonorrhoea and certain forms of non-gonococcal urethritis. Chlamydozoan O.G. is considered a more important causal factor than "L" organisms. Aureomycin appears to be the most useful antibiotic for such infections. *James Marshall*

GONORRHOEA (Therapy)

Terramycin in the Treatment of Gonorrhea in Women. [In English.] PUTKONEN, T. (1951). *Ann. Med. exp. Biol. fenn.*, **29**, 115. 5 refs.

The author treated 69 females suffering from gonorrhoea with single oral doses of terramycin. Patients were kept in hospital for 2 weeks and regarded as cured if four negative post-treatment smears and cultures were obtained during this time. Only six of twelve patients were cured when given 0·5 g., but of 55 given 1 g., 45 (82 per cent.) were considered cured. It is concluded that terramycin is an effective drug in the treatment of gonorrhoea, although in the doses given the results were slightly inferior to those obtained with single injections of either penicillin or streptomycin. "It seems that terramycin will not supersede parenteral penicillin in the treatment of gonorrhoea, but it can compete with penicillin in those cases in which oral treatment is preferable."

[These results are considerably better than those obtained by the abstracter with single doses. They can be improved by giving two doses each of 1 g. at an interval of 6 hours.] *R. R. Willcox*

Limitations of Penicillin Therapy in Gonorrhoea. SHAH, J. M. (1951). *Medicus*, **2**, 12. 3 refs.

Penicillin Treatment of Gonorrhea at Oslo Public Health Stations. [In English.] GJESSING, H. C. (1951). *Acta derm.-venereol., Stockh.*, **31**, 249.

Treatment of Gonorrhoea (Zur Therapie der Gonorrhöe). SCHUERMANN, H. (1951). *Münch. med. Wschr.*, **93**, 1153. 7 refs.

MISCELLANEOUS

The Trachoma-Psittacosis-Lymphogranuloma Venereum Group of Viruses: the Chlamydozoaceae. THYGESON, P. (1951). *Amer. J. Ophthal.*, **34**, 7. 23 figs, 117 refs.

An account of a group of viruses lying midway between the typical large viruses and the rickettsia, for which the family name *Chlamydozoaceae* has been suggested.

They differ from the typical large viruses in: (1) ease of staining of the initial and elementary bodies; (2) basophilic character of the bodies; (3) character of the inclusion matrix; (4) sequence of the morphological variation; (5) susceptibility to chemotherapy.

The family may be divided into those that have a special affinity for the reticulo-endothelial system—genus *Miyagananella*, including the agents responsible for lymphogranuloma venereum and psittacosis—, and those mainly affecting the eye—genus *Chlamydozoon*, including trachoma and inclusion conjunctivitis. A third group, the *Colesiota* which are responsible for specific ophthalmitis in sheep, cattle, hogs, and goats, were, at first, classified as rickettsia but the absence of an arthropod vector seems to indicate that they too should be included in the *Chlamydozoaceae*.

Although the essential difference between the first two groups is their tissue affinity, lymphogranuloma venereum has ocular complications in a significant number of cases. Episcleritis, follicular conjunctivitis, uveitis, keratitis, and especially Parinaud's syndrome, have all been reported.

The individual members of the group are then reviewed, but for the details of these the reader must be referred to the original paper. *E. C. Glover*

Recurrent Non-specific Urethritis associated with Respiratory Catarrh, Stomatitis, Conjunctivitis, and an Erythematous Vesicular Eruption of the Legs and Forearms. HELMAN, J. (1950). *S. Afr. med. J.*, **24**, 688. 1 fig, 3 refs.

A 29-year-old European had suffered for 9 years, two or three times a year, from attacks of urethritis associated with a sore mouth and chest complaints, a rash on the skin, and sore eyes. He had been treated at V.D. clinics, but gonococci had never been found. The author describes such an attack which he personally observed: temp. 100° C; thick yellow urethral discharge with erosions on the glans penis and ulcers in the preputial sac; no gonococci; productive cough with muco-purulent sputum; signs of bronchitis but no consolidation of the lungs; inflammation of the bulbar conjunctiva with oedema of the upper lid and a superficial conjunctival ulcer; no purulent discharge from the conjunctiva; Wassermann reaction negative. Ten days after the onset of the urethritis a patchy erythematous rash developed on the forearms and on the legs between knees and ankles. The centre of each patch became vesicular. Treatment with penicillin (500,000 units of procaine-penicillin daily) seemed to have a good effect and led to the disappearance of all symptoms. Five months later another attack was observed which ran exactly the same course.

The author regards this as a case of Stevens-Johnson syndrome showing, however, some unusual features.

A. Jokl

Side-Effects of Chloramphenicol and Aureomycin, with Special Reference to Oral Lesions. TOMASZEWSKI, T. (1951). *Brit. med. J.*, **1**, 388. 4 figs, 26 refs.

The author, working at the Royal Infirmary, Edinburgh, describes the side-effects observed in seventy patients receiving 2 g. chloramphenicol daily (average total 32 g.) and 56 patients receiving 2 g. aureomycin daily (average total 28 g.). General reactions, such as drowsiness, malaise, or skin rashes, were rare. Oral manifestations occurred in over 50 per cent. of cases and were commoner in young women, developing more rapidly in cases previously treated with penicillin and streptomycin. An atrophic glossitis was frequently seen; hypertrophic glossitis with brown discoloration of the tongue was less common. Scrapings from the tongue revealed the replacement of the usual bacterial flora by fungi, usually *Candida albicans*. Dryness of the mouth with sore throat, interference with taste, redness of the mouth with blisters and angular stomatitis similar in appearance to vitamin-B deficiency were also seen and responded to vitamin-B complex therapy. Gastro-intestinal symptoms, such as flatulence, nausea, and diarrhoea, were commoner with aureomycin, as also were rectal and genital changes.

I. Ansell

Monilial Infections complicating the Therapeutic Use of Antibiotics. WOODS, J. W., MANNING, I. H., and PATTERSON, C. N. (1951). *J. Amer. med. Ass.*, **145**, 207. 2 figs, 2 refs.

By the suppression of bacterial growth the administration of antibiotics may have an enhancing effect on the growth of fungi. The authors describe 25 cases of moniliasis occurring apparently as a direct sequel to antibiotic therapy, in which the presence of *Candida* (*Monilia*) *albicans* was confirmed in all cases by culture. The cases fall into three groups.

Group 1. Regardless of the route of administration, penicillin, aureomycin, and chloramphenicol might lead to oropharyngeal and oesophageal moniliasis. It usually appeared 24 to 72 hours after the condition which was the reason for antibiotic therapy had disappeared, but might occur during antibiotic treatment. The tongue, buccal mucosa, sense of taste and/or any part of the upper alimentary tract might be affected. Four cases are reported in detail and sixteen cases are tabulated under the headings of age, antecedent antibiotic treatment, and clinical symptoms. The tongue was affected in all cases.

Group 2. Infection of the intestinal tract with diarrhoea. The presenting complaint was usually that of a mild persistent diarrhoea which developed after antibiotic treatment of some infection usually not related to the gastro-intestinal tract. Culture of faeces on Sabouraud's medium revealed *C. albicans* in significant numbers. No other potentially pathogenic organisms were present to account for the illness. Of three cases described in detail, in two there was also generalized urticaria as a result of penicillin sensitivity. An additional three cases are mentioned in which *C. albicans* was isolated as the predominant organism on stool culture without giving rise to intestinal symptoms.

Group 3. Two cases are described in which broncho-pulmonary moniliasis appeared as a complication of antibiotic treatment for acute and chronic pulmonary infections. In both cases skin tests and agglutination tests for monilia were positive and desensitization with increasing strength of monilial vaccine was carried out.

The factors possibly responsible for the occurrence of the monilial infection are discussed. The most likely cause appears to be the suppression of the bacterial flora competing with *Candida* for nutrition in the same substrate.

Ferdinand Hillman

Syphilis and Gonorrhea as Causes of Blindness. A Study of Persons declared legally Blind in Ohio. FREEBLE, JNR., C. R., and DONOHUE, J. F. (1951). *J. Amer. med. Ass.*, **146**, 1500. 10 tables, 9 refs.

Of the 6,442 blind registered people in the 10-year period in Ohio, 2,427 had an ascertained cause of blindness; of these 20·9 per cent. were syphilitics (representing 59·5 per cent. of those cases caused by specific infections); there was no significant change in this proportion over the individual 10 years. Optic atrophy was present in 67·7 per cent., and interstitial keratitis in 10·4 per cent. Blindness due to gonorrhoeal ophthalmia had dropped from 0·8 per cent. to 0·4 per cent. from the preceding survey. Other aetiological factors are considered.

P. D. Trevor-Roper

Erythema Multiforme Exudativum Major (Stevens-Johnson Syndrome). ASHBY, D. W., and LAZAR, T. (1951). *Lancet*, **1**, 1091. 6 figs, 48 refs.

The authors review 77 cases of erythema multiforme exudativum major from the literature and describe in

detail four cases of their own ; twenty cases occurred between 0 and 9 years of age, 25 between 10 and 19 years, and 24 between 20 and 29. The remaining twelve patients were 30 or over. There were 66 males and fifteen females. The syndrome was much commoner in the winter months. The characteristic manifestations were often preceded by general malaise and signs of an upper respiratory tract infection. All had mouth lesions, frequently with great pain on swallowing. In 44 cases there was a grey or white membrane. In 23 there were vesicles and in thirteen there was ulceration. Frequently swelling, redness, and ulceration of the lip, followed by bleeding, occurred. Eye lesions were common, conjunctivitis occurring in 74 cases. In males there was often ulceration of the glans penis ; of 66 males, thirty had penile lesions and seven had urethral discharge. A skin eruption was observed in 67 patients, developing between the first and fourteenth days, lasting for 5 to 46 days, usually about 3 weeks. The scalp was rarely affected, but otherwise the distribution was variable. The lesions were erythematous, vesicular, and bullous. Parenchymatous lung lesions occurred in 25 cases, and usually consisted of broncho-pneumonia and pneumonitis. There was no general lymphadenopathy. The spleen was felt in only one case. A variety of other signs and symptoms occurred in individual cases. There was commonly a polymorphonuclear leucocytosis.

Recurrences occurred in eighteen cases, and there were eight deaths. Attempts to isolate a causative organism have met with little success. The syndrome is thought to be an acute specific fever, possibly of virus aetiology, but there was no evidence of direct contagion. In two of the cases from the literature there was a good response to aureomycin ; otherwise no specific treatment is known. *R. S. Illingworth*

Non-Gonococcal Urethritis other than Virus Urethritis (Les uréthrites non gonococciques en dehors des uréthrites à virus). GUILLERET, P., and PELLERAT, J. (1951). *Bull. Soc. franç. Derm. Syph.*, **58,** 125. 2 refs.

Antibiotics *versus* Donovian Granulomatis. CHEN, C. H., DIENST, R. B., and GREENBLATT, R. B. (1951). *Amer. J. Syph.*, **35,** 383. 16 refs.

Granuloma Inguinale : Further Observations on Results of Treatment with Aureomycin and Chloramphenicol. ROBINSON, R. C. V., and CRONK, B. (1951). *Amer. J. Syph.*, **35,** 378. 8 refs.

Venereal Diseases in Israel. BERLIN, C. (1951). *Hebrew med. J.*, **1,** 182.

Nine Cases of Granuloma Inguinale treated with Chloromycetin. ZISES, M., and SMITH, G. C. (1951). *Amer. J. Syph.*, **35,** 294. 4 refs.

Terramycin in Treatment of Granuloma Inguinale. GREENBLATT, R. B., BARFIELD, W. E., DIENST, R. B., and WEST, R. M. (1951). *J. vener. Dis. Inform.*, **32,** 113. 22 refs.

A Simple Stain for Donovan Bodies for the Diagnosis of Granuloma Inguinale. GREENBLATT, R. B., DIENST, R. B., and WEST, R. M. (1951). *Amer. J. Syph.*, **35,** 291. 3 figs, 5 refs.

Specificity of Skin Tests in Lymphogranuloma Venereum and Chancroid. [In English.] REYMANN, F. (1951). *Acta derm.-venereol., Stockh.*, **31,** 257. 3 refs.

Complement-Fixation with Lygranum Antigen. [In English.] REYN, A. (1951). *Acta derm.-venereol., Stockh.*, **31,** 262. 6 refs.

Venereal Disease in Female Vagrants. LOZANO, A. A. (1951). *J. Philipp. med. Ass.*, **27,** 171. 2 refs.

Homosexuality as a Source of Venereal Disease. KANEE, B., and HUNT, C. L. (1951). *Canad. med. Ass. J.* **65,** 138. 2 figs, 2 refs.

Treatment of Early Lymphogranuloma Venereum with Aureomycin. SCHAMBERG, I. L., CARROZZINO, O. M., and BOGER, W. P. (1951). *Amer. J. Syph.*, **35,** 370. 2 figs, 12 refs.

Venereal Diseases in Iceland. GUDMUNDSSON, H. (1951). *Acta derm.-venereol., Stockh.*, **31,** 412. 1 fig.

Role of the Pleuropneumonia-like Organism in Venereal Rheumatism (Rôle des " organismes L " dans les rheumatismes vénériens). DUREL, P., ROIRON-RATNER, V., and BOREL, L. J. (1951). *Pr. méd.*, **59,** 789. 39 refs.

Aetiology and Diagnosis of Chronic Prostatitis (Zur Ätiologie und Diagnose der chronischen Prostatis). WILDE, H. (1951). *Z. Haut- u. GeschlKr.*, **10,** 497. 30 refs.